

**VIRGINIA
STANDARDS OF LEARNING ASSESSMENTS**

Spring 2002 Released Test

**GRADE 3
SCIENCE**

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DIRECTIONS

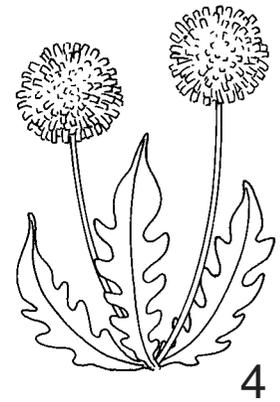
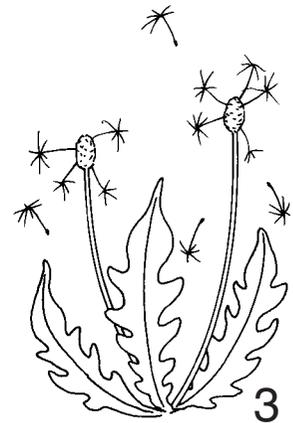
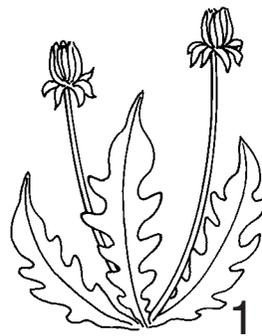
Read each question carefully and choose the best answer. Then mark the space in the answer booklet for the answer you have chosen.

SAMPLE

When the Earth is seen from outer space, it looks mainly blue. This is because most of the Earth is covered with —

- A ice
- B mountains
- C oceans
- D deserts

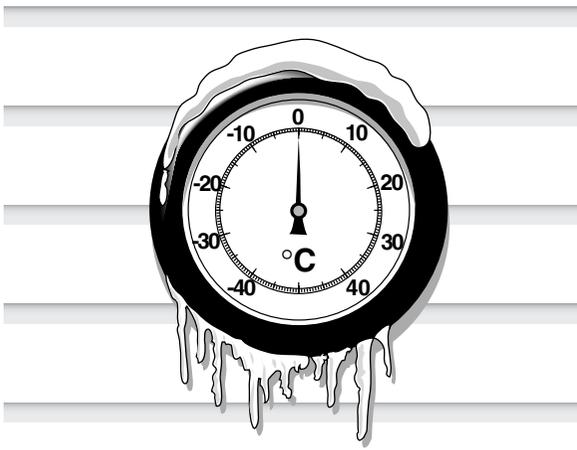
1



Some of the stages in the development of a dandelion are shown above, but they are out of order. What should be the order of the pictures?

- A 1, 4, 2, 3
- B 1, 3, 2, 4
- C 4, 1, 2, 3
- D 4, 3, 2, 1

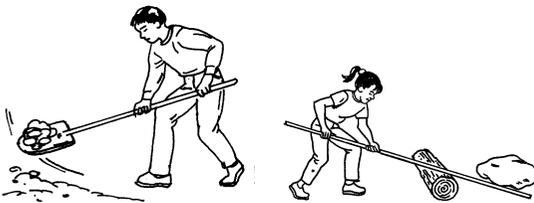
2



What is the temperature of the air around the thermometer?

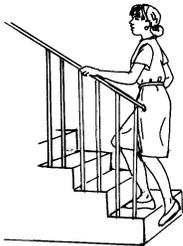
- F 0°Celsius
- G 3°Celsius
- H 5°Celsius
- J 8°Celsius

3 Which of these best shows wheels and axles being used?



A

C



B

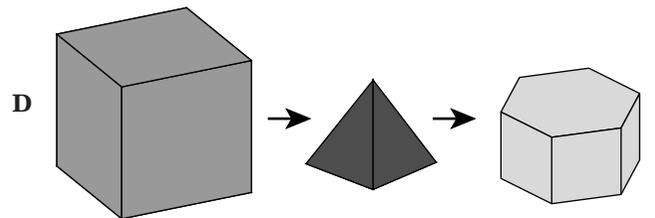
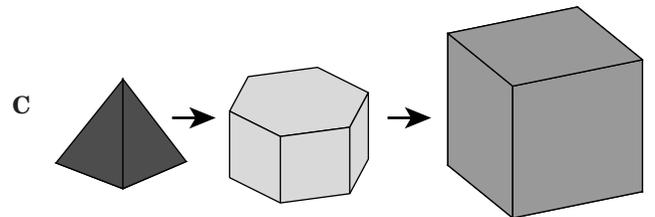
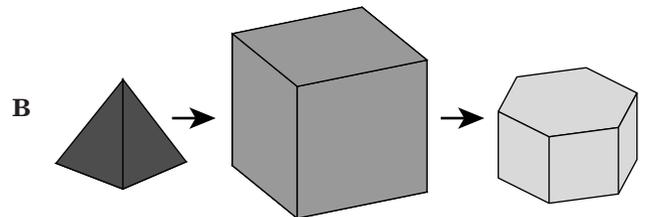
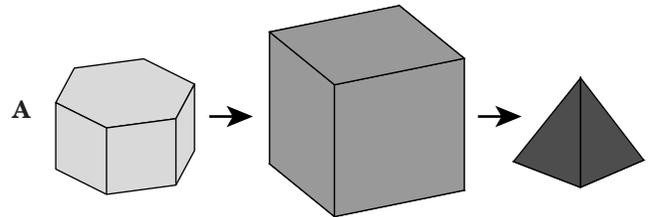


D

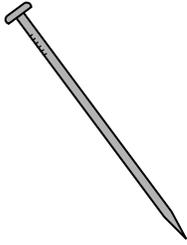
4 Water trapped inside the cracks of rocks may freeze during the winter. This can cause —

- F earthquakes to occur
- G rocks to break apart
- H diamonds to form
- J volcanic rocks to form

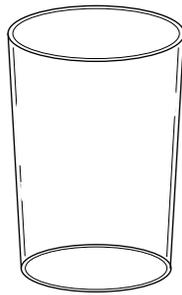
5 Which of these shows the correct way to put these wooden blocks in order by size from smallest to largest?



6 Which object will be attracted to a magnet?



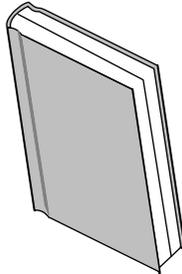
F



H



G

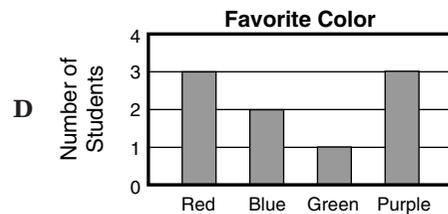
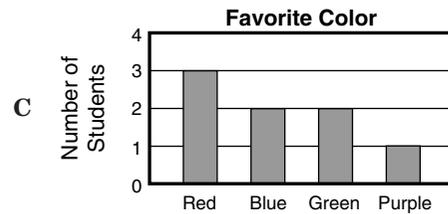
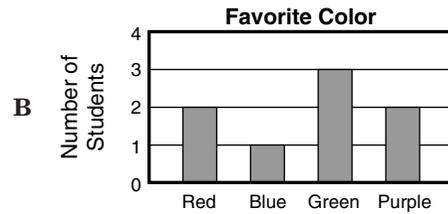
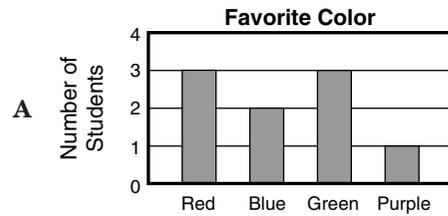


J

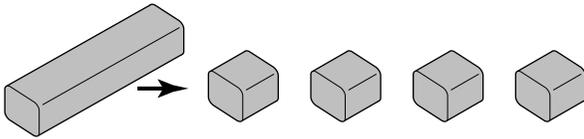
7

Student	Favorite Color
John	Red
Mark	Blue
Mai	Blue
Jose	Green
Jerome	Purple
Lacrisha	Purple
Jonathan	Red
Sidney	Red
Bernard	Purple

Which of the following graphs correctly shows the above data gathered by a third-grade student?



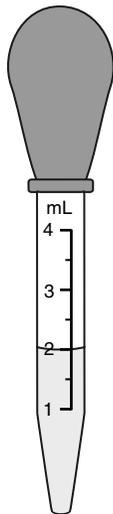
8



The picture shows a stick of clay. When the clay was cut into pieces, which of these was the only thing that changed?

- F Its stickiness
- G Its softness
- H Its shape
- J Its color

9



What is the volume of water in the eyedropper?

- A 2.0 milliliters
- B 2.2 milliliters
- C 20 milliliters
- D 25 milliliters

10 The weather is part of the daily news. Tracking the weather is most important for people who —

- F work in banks
- G sell televisions
- H plant crops
- J use computers

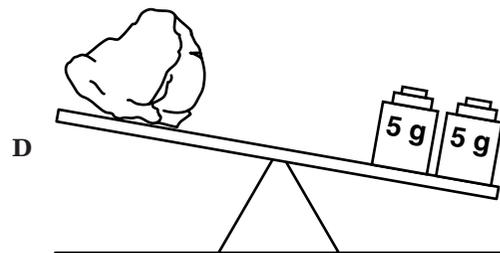
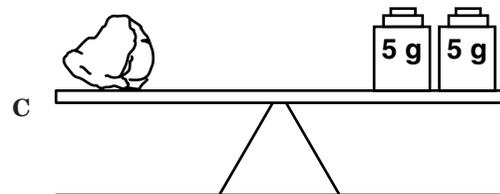
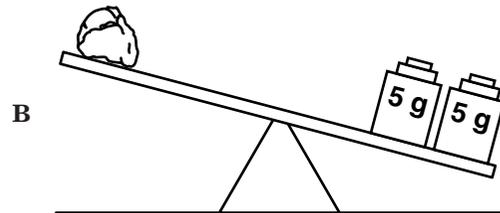
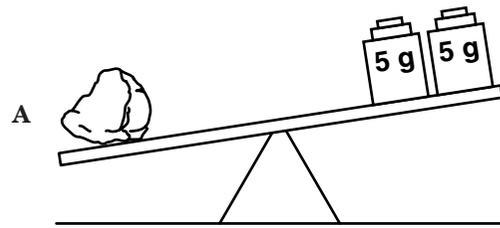
11 Many plants wilt in the summertime because they do not have enough —

- A flowers
- B water
- C heat
- D leaves

12 Perfume is sprayed in the air. You can smell it but not see it because —

- F perfume is a liquid
- G it is very expensive
- H your nose is more sensitive
- J the droplets are too small to see

13 Which of these shows a rock with a mass of 10 grams?



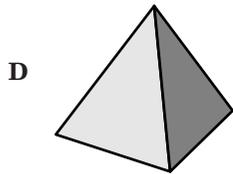
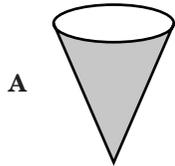
14 Which of these is a natural part of soil?

- F Paper
- G Plastic
- H Silt
- J Tires

15



Which of these objects can make both of the shadows above?



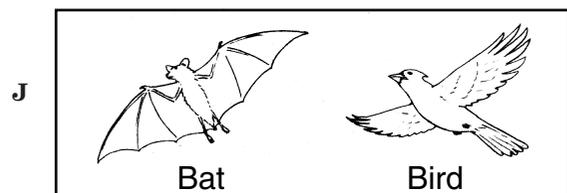
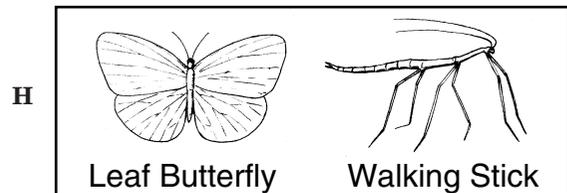
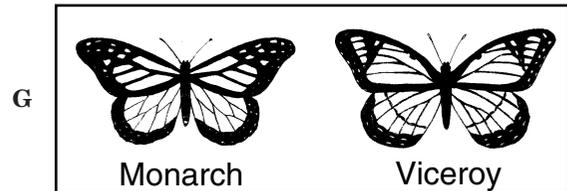
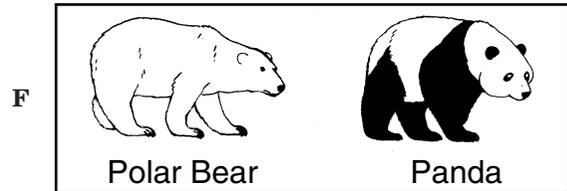
16 Which of these shows food-storing behavior?

- F A dog barking at a cat
- G A bird building a nest
- H An ant carrying a larva to a new nest
- J A squirrel burying nuts

17 Which of these will most likely float on water?

- A A ball of clay
- B A block of pine wood
- C A nickel
- D A nail

18 Which box shows an animal that mimics the other animal for protection?



19 Which of these is a natural resource?

- A Coal
- B Plastic
- C Cloth
- D Brick

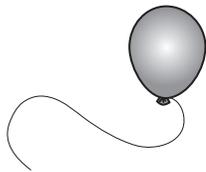
20



Which block will finish the pattern?

- F Blue
- G Green
- H Red
- J Yellow

21 Which of the following objects can increase in volume?



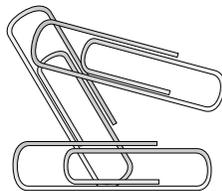
A



C

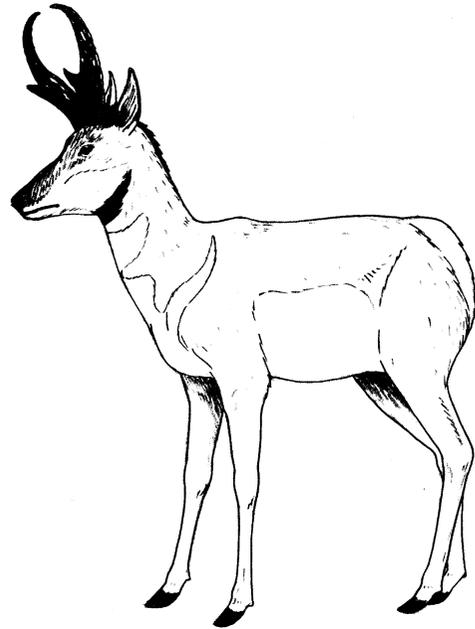


B



D

22

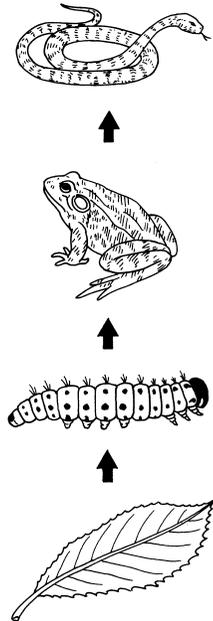


Which type of habitat is this animal best suited for?

- F Marshlands
- G Open plains
- H Sandy beaches
- J Freshwater ponds

23 Which of these can a tree live without?

- A Air
- B Water
- C Birds
- D Light



In this food chain, which organism is the producer?

- F Snake
- G Frog
- H Caterpillar
- J Leaf



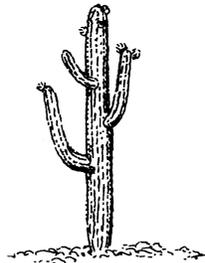
Roberto found the young plant shown in the picture. Which of the four plants below might later have developed from that young plant?



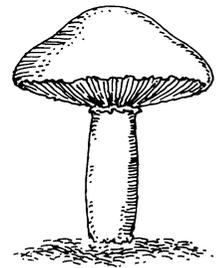
A



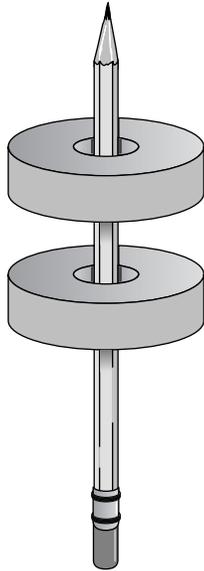
C



B



D



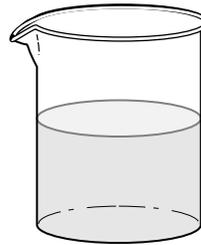
The picture shows some ring magnets on a pencil. What can be understood about these magnets from looking at this picture?

- F The wood in the pencil is attracted to the poles of the magnets.
- G The poles of these magnets have been cut away.
- H The same poles of the magnets are facing each other.
- J The poles of the magnets are around the outside of each magnet.

27 Which of these is a nonliving thing that mice need to live?

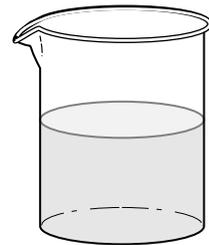
- A Water
- B Grass
- C Seeds
- D Rocks

28 Sugar will dissolve most easily in which beaker?



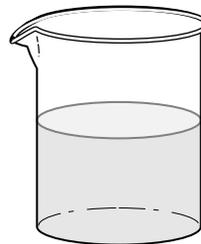
Water at 0°C

F



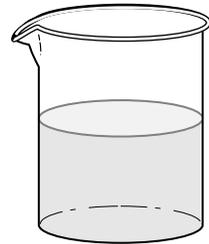
Water at 30°C

H



Water at 15°C

G



Water at 60°C

J

29 The roots of a desert plant are close to the surface of the ground. This helps the plant —

- A stay warm
- B get more air
- C make food more quickly
- D take in rainwater quickly

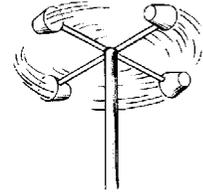
30 Raccoons eat fish, berries, nuts, and green plants. The raccoon is —

- F a producer
- G an omnivore
- H a decomposer
- J a carnivore

31 Which will measure air temperature?



A



C

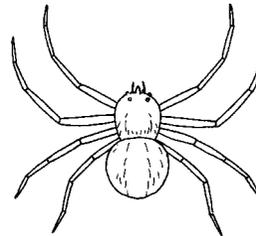


B

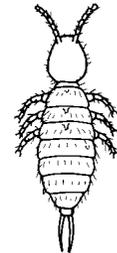


D

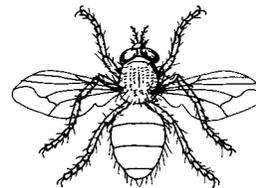
32 Which of these animals should be in a group that has six legs and only two wings?



F



H



G

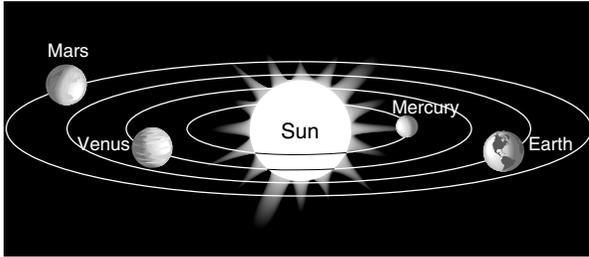


J

33 How do frogs survive the cold winter?

- A They migrate.
- B They become camouflaged.
- C They hide in the trees.
- D They hibernate.

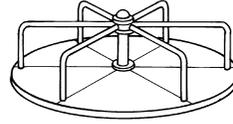
34



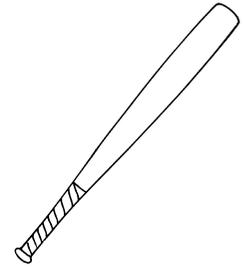
Which planet is probably the hottest?

- F Mars
- G Earth
- H Venus
- J Mercury

35 Which of these shows an inclined plane?



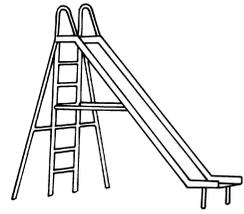
A



C



B



D



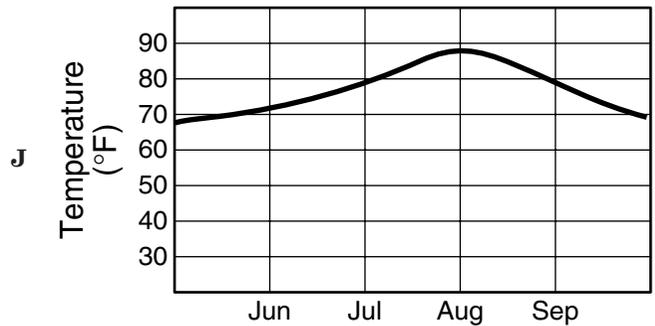
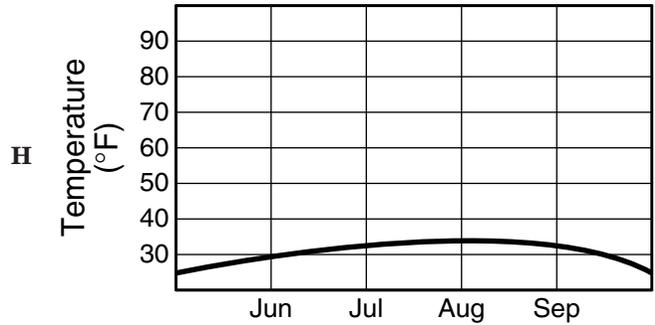
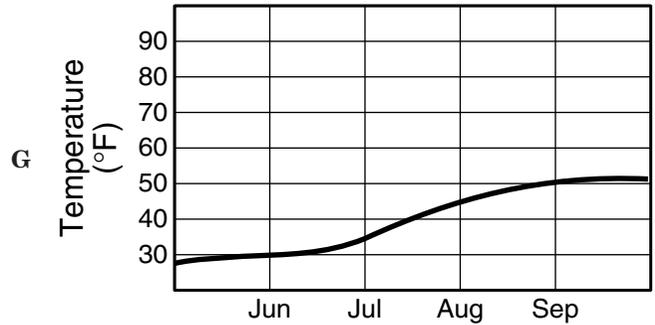
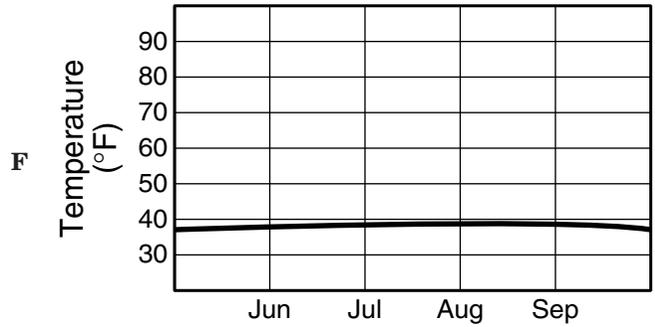
What natural event most likely caused the damage to this forest habitat?

- F A flood
- G A fire
- H A hurricane
- J An earthquake

37 Soil is important for plant growth because it —

- A makes the Earth’s surface hard
- B moves easily from one place to another
- C does not let plant roots grow too deeply
- D contains nutrients to help plants grow

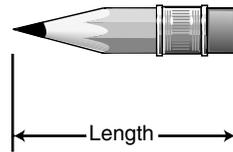
38 Which of these shows what the weather is like during the summertime in Virginia?



39 A ball is placed in the beam of a flashlight. The ball will —

- A become larger
- B create a shadow
- C move away from the light
- D move toward the light

40



The pencil above is about —

- F 1 centimeter
- G 3 centimeters
- H 10 centimeters
- J 20 centimeters

Answer Key

Test Sequence	Correct Answer	Reporting Category	Reporting Category Description
1	A	017	Life Processes and Living Systems
2	F	015	Scientific Investigation
3	D	016	Force, Motion, Energy, and Matter
4	G	018	Earth/Space Systems and Cycles
5	C	015	Scientific Investigation
6	F	016	Force, Motion, Energy, and Matter
7	D	015	Scientific Investigation
8	H	016	Force, Motion, Energy, and Matter
9	A	015	Scientific Investigation
10	H	018	Earth/Space Systems and Cycles
11	B	018	Earth/Space Systems and Cycles
12	J	016	Force, Motion, Energy, and Matter
13	C	015	Scientific Investigation
14	H	018	Earth/Space Systems and Cycles
15	A	016	Force, Motion, Energy, and Matter
16	J	017	Life Processes and Living Systems
17	B	016	Force, Motion, Energy, and Matter
18	G	017	Life Processes and Living Systems
19	A	018	Earth/Space Systems and Cycles
20	H	015	Scientific Investigation
21	A	016	Force, Motion, Energy, and Matter
22	G	017	Life Processes and Living Systems
23	C	017	Life Processes and Living Systems
24	J	017	Life Processes and Living Systems
25	C	018	Earth/Space Systems and Cycles
26	H	016	Force, Motion, Energy, and Matter
27	A	017	Life Processes and Living Systems
28	J	016	Force, Motion, Energy, and Matter
29	D	017	Life Processes and Living Systems
30	G	017	Life Processes and Living Systems
31	A	015	Scientific Investigation
32	G	015	Scientific Investigation
33	D	017	Life Processes and Living Systems
34	J	015	Scientific Investigation
35	D	016	Force, Motion, Energy, and Matter
36	G	018	Earth/Space Systems and Cycles
37	D	018	Earth/Space Systems and Cycles
38	J	018	Earth/Space Systems and Cycles
39	B	018	Earth/Space Systems and Cycles
40	G	015	Scientific Investigation